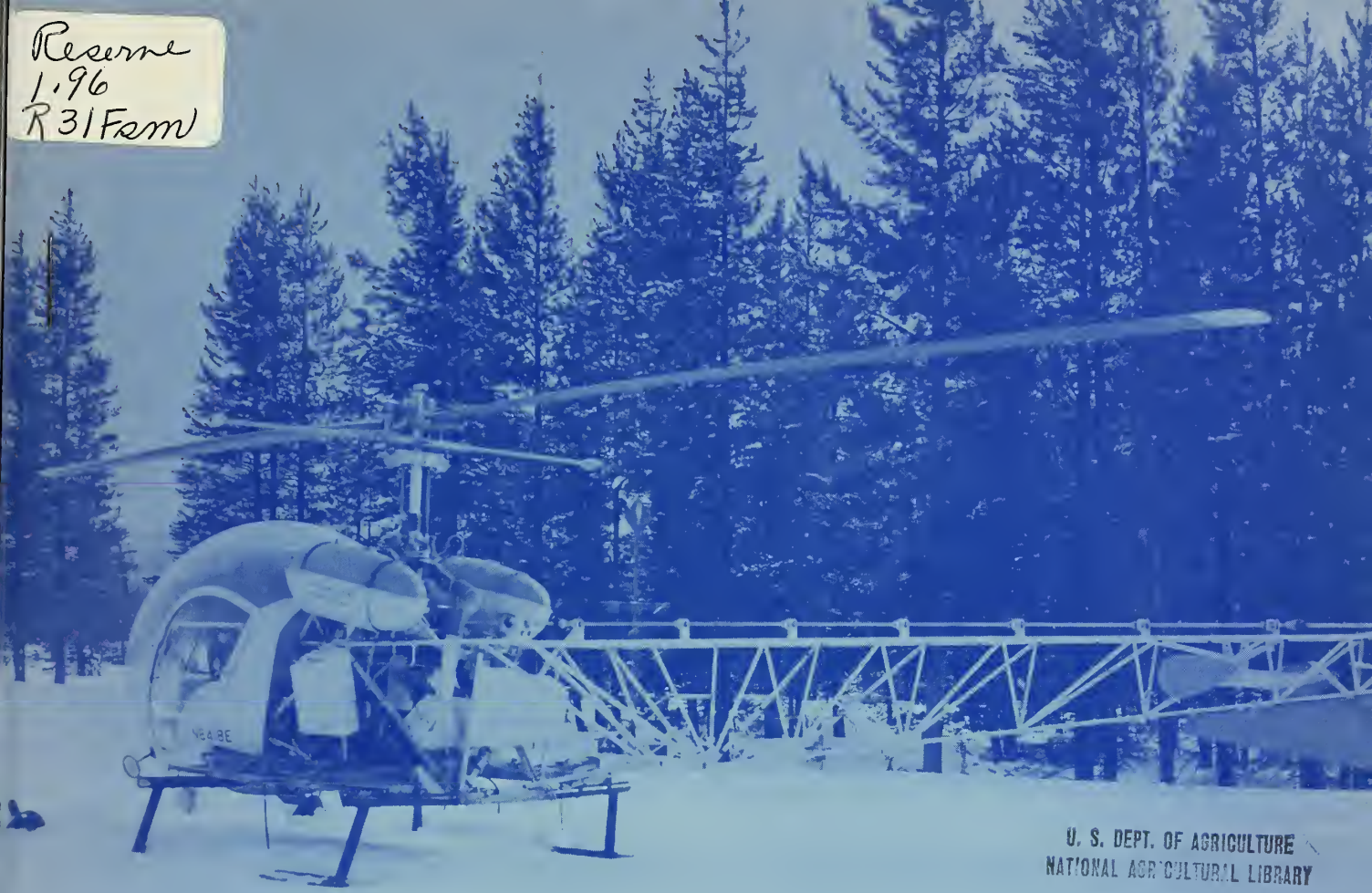


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CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
COLORADO and NEW MEXICO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAR. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

| REPORTS | ISSUED | LOCATION | COOPERATING WITH |
|-------------------------|------------------------------------|------------------------|--|
| RIVER BASINS | | | |
| WESTERN UNITED STATES | MONTHLY (FEB.-MAY) | PORTLAND, OREGON | ALL COOPERATORS |
| BASIC DATA SUMMARY | OCTOBER 1 | PORTLAND, OREGON | ALL COOPERATORS |
| STATES | | | |
| ALASKA | MONTHLY (MAR.-MAY) | PALMER, ALASKA | ALASKA S.C.D. |
| ARIZONA | SEMI-MONTHLY (JAN. 15 - APR. 1) | PHOENIX, ARIZONA | SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION |
| COLORADO AND NEW MEXICO | MONTHLY (FEB.-MAY) | FORT COLLINS, COLORADO | COLD. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER |
| IDAHO | MONTHLY (JAN.-JUNE) | BOISE, IDAHO | IDAHO STATE RECLAMATION ENGINEER |
| MONTANA | MONTHLY (JAN.-JUNE) | BOZEMAN, MONTANA | MONT. AGR. EXP. STATION |
| NEVADA | MONTHLY (JAN.-MAY) | RENO, NEVADA | NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES |
| OREGON | MONTHLY (JAN.-JUNE) | PORTLAND, OREGON | OREG. STATE UNIVERSITY OREGON STATE ENGINEER |
| UTAH | MONTHLY (JAN.-JUNE) | SALT LAKE CITY, UTAH | UTAH STATE ENGINEER |
| WASHINGTON | MONTHLY (FEB.-JUNE) | SPOKANE, WASHINGTON | WN. STATE DEPT. OF CONSERVATION |
| WYOMING | MONTHLY (FEB.-JUNE) | CASPER, WYOMING | WYOMING STATE ENGINEER |

PUBLISHED BY OTHER AGENCIES

| REPORTS | ISSUED | AGENCY |
|------------------|---------------------|---|
| BRITISH COLUMBIA | MONTHLY (FEB.-JUNE) | WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA |
| CALIFORNIA | MONTHLY (FEB.-MAY) | CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF. |

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS
for

COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
DRAINAGE BASINS

Issued

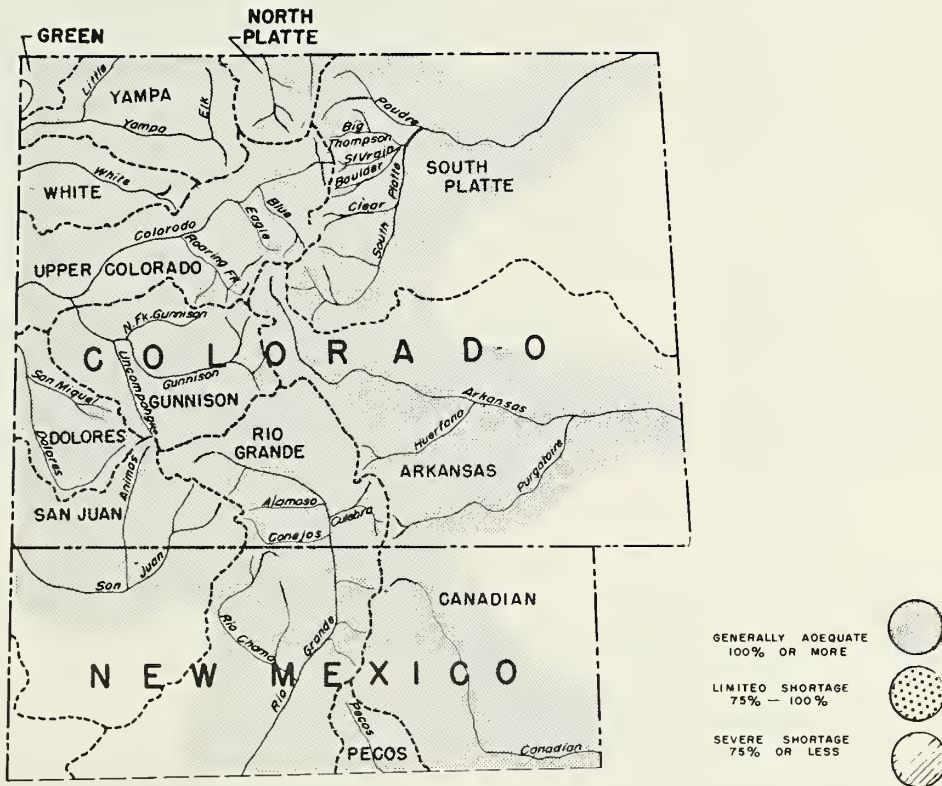
March 1, 1965

Report Prepared By
Jack N. Washichek, Snow Survey Supervisor
and
Don W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado

State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe, New Mexico

WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAM-FLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

as of

March 1, 1965



COLORADO— The Colorado snow pack is still above normal in all areas of the State, but the outlook for summer runoff is not quite as good as last month. Snow during February dropped percentage wise over most of the State 10 to 20%. The snow pack on the Rio Grande is the best in the State with 139% of normal. Reservoir storage is nil in all areas of the State except the South Platte. Here carry-over storage is practically normal. Valley soils are poor in most areas. Several small isolated areas report good soil moisture conditions. Mountain soils are generally about normal for this time of the year. Forecasts will all be above normal, but none are extremely high. Forecasts are based on normal precipitation, so deviation from this will cause increasing or decreasing flows.



NEW MEXICO— Current snow pack in New Mexico. Water users should have adequate water this summer in Upper and Middle Rio Grande Valley. Water supplies below Elephant Butte will still be short. Other Basins, Pecos, Canadian and San Juan should have good flows from the snow pack, however, summer rains will have a greater affect on the runoff. Mountain soil moisture is slightly below normal, while valley soils are generally dry. Carry-over storage is poor. Several years of high runoff are needed to fill these drying reservoirs. Forecasts are all above normal, but none are extremely high. Additional snow would be extremely helpful.

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -

SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -

ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -

RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts

WATERSHED IV -

RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V

DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI -

GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -

COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -

YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

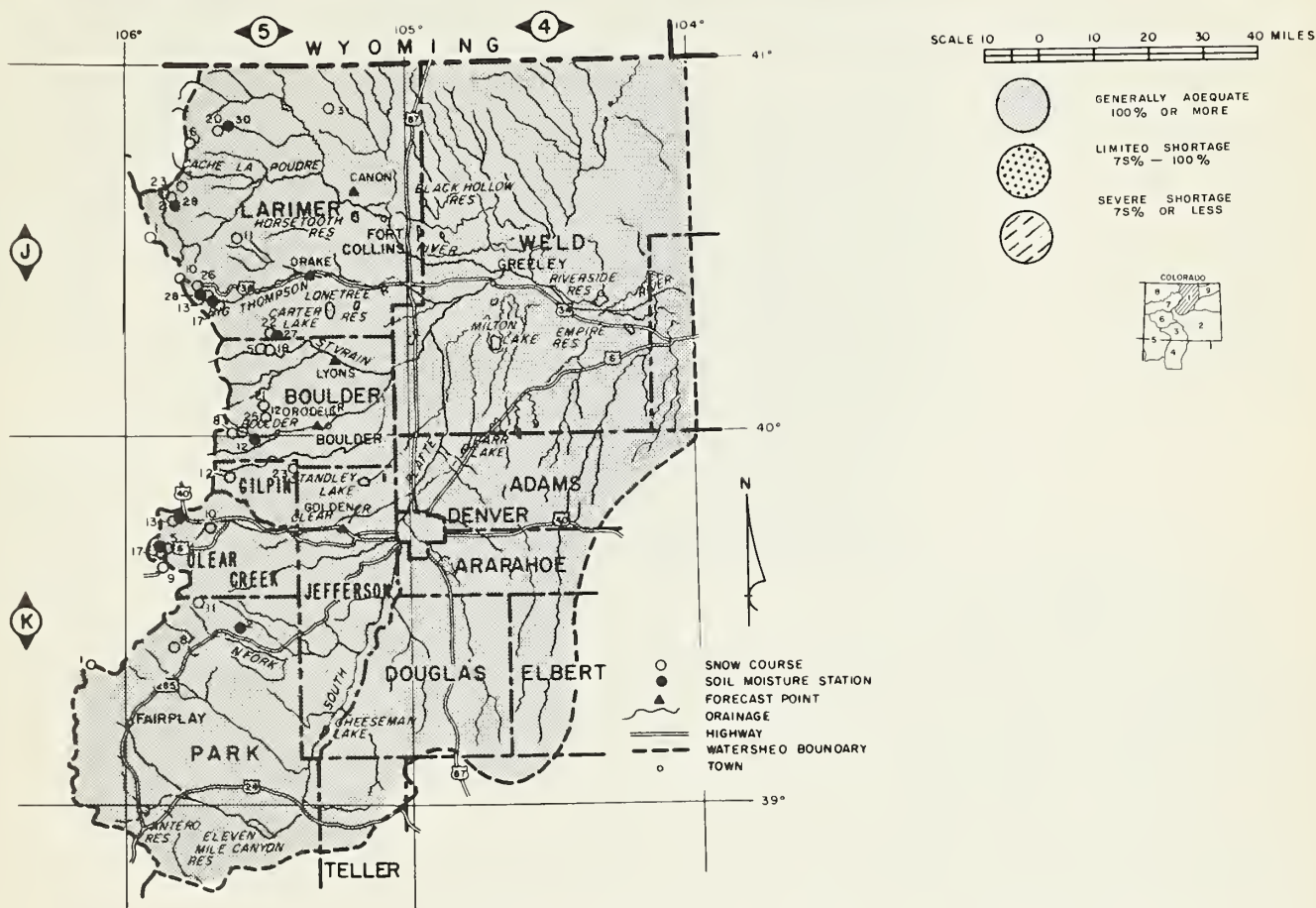
WATERSHED IX -

LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton Peetz, Padroni, Morgan Rock Creek and Yuma Soil Conservation Districts.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO as of March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL — This is the only area of the state that can boast good carry-over storage and can anticipate above normal runoff. This area, even though the runoff will not be extremely high, should be in relatively good shape this summer.

SNOW — Snow pack over the entire basin is 122% of the 1948-62 average. This is only a slight decline from last month. High winds and unseasonably warm temperatures have taken their toll on the existing snow pack. Many places now have less snow than a month ago, however, the water content is higher. The snow pack should build up for another two months.

SOIL MOISTURE — Soil moisture in the mountainous area of the South Platte is nearly normal for this time of the year. Valley soils are reported as fair to poor.

RESERVOIR STORAGE — Reservoir carry storage is still almost normal and will be an excellent supplemental supply to the summer runoff.

FORECASTS — Forecasts range from 103% of normal on the Big Thompson River to a high of 118% on the St. Vrain. All of the other tributary streams should flow around 115% of the 1948-62 average.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

E. A. Nicholson, Area Conservationist,
Littleton, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|------------------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1946-52 |
| South Platte River and Tributaries | | | | | | |
| Baltimore | 5K23 | 2/26 | 25 | 6.5 | 4.6 | - - |
| Berthoud Falls | 5K13 | 2/26 | 50 | 15.0 | 9.1 | 13.0* |
| Big South | 5J3 | 2/27 | 16 | 3.7 | 1.4 | 2.5 |
| Boulder Falls | 5J25 | 2/27 | 46 | 14.5 | 7.4 | 9.9* |
| Cameron Pass (A) | 5J1 | 3/1 | 64 | 20.5 | 19.1 | 19.2 |
| Chambers Lake | 5J2 | 2/27 | 37 | 10.2 | 4.8 | 7.8 |
| Copeland Lake | 5J18 | 2/27 | 19 | 5.6 | 1.9 | 4.5* |
| Deadman Hill (A) | 5J6 | 3/1 | 46 | 15.2 | 13.0 | 12.9 |
| Deer Ridge | 5J17 | 2/25 | 19 | 5.0 | 2.2 | 4.7* |
| Empire | 5K10 | 2/24 | 29 | 7.4 | 4.0 | 6.5* |
| Geneva Park | 5K11 | 2/26 | 22 | 6.3 | 1.8 | 3.7* |
| Grizzly Peak (B) | 5K9 | 2/25 | 60 | 19.4 | 8.1 | 15.0 |
| Hidden Valley | 5J13 | 2/25 | 36 | 10.0 | 5.1 | 9.4 |
| Hoosier Pass | 6K1 | 2/26 | 54 | 17.1 | 6.5 | 11.1 |
| Hour Glass Lake | 5J11 | 2/28 | 27 | 7.7 | 3.6 | 6.0 |
| Jefferson Creek | 5K8 | 2/25 | 42 | 11.3 | 4.0 | 8.0* |
| Lake Irene (B) | 5J10 | Est. | 75 | 24.0 | 12.5 | 20.0 |
| Long's Peak | 5J22 | 2/28 | 41 | 12.5 | 4.3 | 9.8* |
| Lost Lake | 5J23 | 2/27 | 42 | 12.2 | 6.4 | 10.8* |
| Loveland Lift No. 1 | 5K24 | 2/25 | 50 | 15.9 | 12.1 | - - |
| Loveland Pass | 5K5 | 2/25 | 72 | 23.5 | 6.7 | 13.1 |
| Pine Creek | 5J31 | 2/25 | 7 | 2.0 | 1.2 | - - |
| Red Feather | 5J10 | 2/25 | 22 | 6.6 | 4.5 | 6.5* |
| Two Mile | 5J26 | 2/25 | 49 | 14.5 | 7.0 | 12.6* |
| University Camp | 5J8 | 2/27 | 58 | 19.4 | 11.1 | 17.6 |
| Ward | 5J21 | 2/25 | 27 | 7.1 | 2.9 | 5.4* |
| Wild Basin | 5J5 | Est. | 46 | 14.2 | 6.2 | 11.9 |

NOTE: * 1946-52 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

| STREAM AND STATION | FORECAST APRIL - SEPT. | THIS YEAR % AVERAGE | AVERAGE 1946-52 |
|------------------------------------|------------------------|---------------------|-----------------|
| Big Thompson at Drake (2) | 113 | 103 | 110 |
| Boulder at Orodell | 60 | 111 | 54 |
| Cache La Poudre at Canon Mouth (1) | 280 | 114 | 246 |
| Clear Creek at Golden (3) | 156 | 116 | 134 |
| Saint Vrain at Lyons | 94 | 118 | 80 |

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Tunnel.

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1946-52 |
|-----------------|-----------------|-----------|-----------|-------------------------|
| Antero | 33.0 | 0 | 0 | 13.4 |
| Barr Lake | 32.2 | | 16.7 | 20.5 |
| Black Hollow | 8.0 | 3.0 | 4.2 | 3.1 |
| Boyd Lake | 44.0 | 41.8 | 37.0 | 18.6 |
| Cache La Poudre | 9.5 | 7.2 | 8.9 | 6.6 |
| Carter Lake | 108.9 | 81.8 | 78.9 | 63.0 |
| Chambers Lake | 8.8 | 3.3 | 3.6 | 2.2 |
| Cheeseman | 79.0 | 22.3 | 22.6 | 49.8 |
| Cobb Lake | 34.3 | 5.6 | 5.6 | 9.3 |
| Eleven Mile | 81.9 | 27.7 | 60.5 | 74.2 |
| Fossil Creek | 11.6 | 5.3 | 8.7 | 6.0 |
| Gross | 43.1 | 27.4 | 19.2 | - - |
| Halligan | 6.4 | 2.5 | 2.7 | 2.9 |
| Horsetooth | 143.5 | 80.2 | 81.7 | 69.5 |
| Lake Loveland | 14.3 | 31.0 | 10.5 | 6.3 |
| Lone Tree | 9.2 | 2.0 | 8.0 | 5.8 |
| Mariano | 5.4 | 21.8 | 5.3 | 2.7 |
| Marshall | 10.3 | 0.6 | 1.2 | 2.5 |
| Marston | 18.9 | 15.4 | 10.5 | 13.8 |
| Milton | 24.4 | 1.2 | 12.6 | 10.7 |
| Standly | 18.5 | 5.9 | 6.9 | 10.2 |
| Terry Lake | 8.2 | 3.0 | 9.4 | 4.6 |
| Union | 12.7 | 6.4 | 2.5 | 7.6 |
| Windsor | 18.6 | 2.6 | 12.1 | 8.6 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Alpine Camp | 11/19 | 6.9 | 3.2 | 3.3 | 3.5 |
| Beaver Dam | 12/2 | 7.1 | 3.0 | 3.3 | 3.8 |
| Clear Creek | 12/2 | 9.5 | 7.0 | 7.6 | 6.7 |
| Feather | 11/5 | 10.1 | 4.2 | 4.2 | 4.6 |
| Guard Station | 12/2 | 6.9 | 2.8 | 3.1 | 3.4 |
| Hoop Creek | 11/17 | 4.9 | 2.6 | 3.6 | 2.7 |
| Hoosier Pass | 11/23 | 7.8 | 4.3 | 4.9 | 5.1 |
| Kenosha Pass | 11/23 | 4.4 | 2.3 | 2.8 | 2.6 |
| Laramie Road | 11/5 | 12.4 | 7.1 | 7.1 | 7.6 |
| Two Mile | 12/2 | 9.1 | 4.4 | 4.2 | 5.8 |

ALL PROFILES 4 FEET DEEP

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UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Fort Collins, Colorado

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

Will D. McCorkle. Area Conservationist.

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|-------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-52 |
| Arkansas River | | | | | | |
| Bigelow Divide | 5L3 | 2/25 | 26 | 5.3 | 7.9 | - - |
| Blue Lakes | 5M6 | 2/24 | 13 | 2.9 | 5.2 | - - |
| Bourbon | 5M5 | 2/24 | 36 | 8.0 | 5.5 | 6.7 |
| Cooper Hill | 6K23 | 2/25 | 45 | 8.8 | 5.3 | - - |
| Cucharas Pass | 5M7 | 2/24 | 33 | 6.7 | 10.1 | - - |
| East Fork | 6K17 | 2/25 | 39 | 12.1 | 5.2 | 8.4* |
| Four Mile Park | 6K7 | 2/27 | 31 | 8.3 | 2.4 | 4.5 |
| Fremont Pass | 6K8 | 2/25 | 54 | 16.9 | 6.8 | 13.8 |
| Garfield | 6L8 | 2/24 | 50 | 16.7 | 7.1 | - - |
| LaVeta Pass (B) | 5M1 | 2/24 | 40 | 11.1 | 7.8 | 8.5 |
| Monarch Pass | 6L4 | 2/24 | 58 | 18.6 | 9.8 | 15.6 |
| St. Elmo (A) | 6L5 | 2/25 | 40 | 10.8 | 6.0 | 10.7* |
| Tennessee Pass | 6K2 | 2/27 | 48 | 13.7 | 5.1 | 8.7 |
| Tomichi | 6L7 | 2/24 | 46 | 15.0 | 9.8 | - - |
| Twin Lakes Tunnel | 6K3 | 2/25 | 38 | 11.7 | 5.0 | 9.7 |
| Westcliffe | 5L2 | 2/24 | 32 | 7.5 | 5.4 | 5.5* |

NOTE: * - 1948-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-52 |
|--------------|-----------------|-----------|-----------|-------------------------|
| Adobe Creek | 61.6 | 0 | 0 | 13.9 |
| Clear Creek | 11.4 | 10.4 | 7.8 | 5.4 |
| Cucharas | 40.0 | 0 | 0.7 | 5.3 |
| Great Plains | 150.0 | 0 | 0 | 45.3 |
| Horse Creek | 26.9 | 0 | 0 | 6.0 |
| John Martin | 366.6 | 2.7 | 6.7 | 77.7 |
| Meredith | 41.9 | 0 | 0 | 10.2 |
| Model | 15.0 | 0 | 5.7 | 2.6 |
| Sugar Loaf | 17.4 | 5.3 | 4.2 | 7.0 |
| Twin Lakes | 57.9 | 11.2 | 16.8 | 19.7 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|-------------------|----------------|-------------------|-----------|-----------|-------------------------|
| Garfield | 11/13 | 6.7 | 4.7 | 2.4 | 3.3 |
| King | 11/13 | 3.3 | 2.3 | 0.8 | 1.8 |
| LaVeta Pass | 11/12 | 11.9 | 6.1 | 3.7 | 7.0 |
| Leadville | 12/3 | 7.8 | 5.2 | 4.1 | 3.9 |
| Twin Lakes Tunnel | 11/19 | 4.5 | 3.0 | 1.0 | 2.1 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|------------------------|-------------------------|---------------------|-----------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % AVERAGE | AVERAGE 1948-52 |
| Arkansas at Pueblo (1) | 387 | 120 | 323 |
| Arkansas at Salida (1) | 420 | 122 | 345 |
| Cucharas near LaVeta | 16 | 115 | 14 |
| Purgatoire at Trinidad | 56 | 124 | 45 |

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

- (1) Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

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UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Fort Collins, Colorado

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POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

Benny Martin, Area Conservationist,
Durango, Colorado

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|-------------------------------|-----|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1946-52 |
| <u>Rio Grande in Colorado</u> | | | | | | |
| Cochetopa Pass | | 6L6 2/23 | 29 | 5.7 | 4.5 | 4.9* |
| Hiway | | 6M19 2/25 | 82 | 30.3 | 9.4 | 21.6* |
| Lake Humphreys | (A) | 6M15 2/26 | 50 | 12.0 | 3.8 | 6.6* |
| Pass Creek | | 6M18 2/25 | 54 | 18.0 | 6.2 | 10.2* |
| Pool Table | (A) | 6M14 2/26 | 40 | 11.2 | 3.8 | 5.5* |
| Porcupine | (A) | 6M20 2/26 | 45 | 12.6 | 4.0 | 9.6* |
| Red Mountain Pass | (B) | 7M15 2/25 | 82 | 30.3 | 15.5 | 26.0* |
| Santa Maria | | 7M17 2/26 | 31 | 7.1 | 2.9 | 5.0 |
| Upper Rio Grande | | 7M16 2/25 | 41 | 11.2 | 2.8 | 7.9 |
| Wolf Creek Pass | | 6M1 2/25 | 91 | 34.5 | 11.5 | 25.6 |
| Wolf Creek Summit | (B) | 6M17 2/25 | 96 | 34.6 | 11.1 | 23.2 |
| <u>Alamosa River</u> | | | | | | |
| Silver Lakes | | 6M4 NS | | | 6.5 | 6.6 |
| Summitville | (A) | 6M6 2/26 | 66 | 21.0 | 8.1 | 15.5 |
| <u>Conejos River</u> | | | | | | |
| Cumbres Pass | (A) | 6M7 2/26 | 70 | 25.2 | 8.2 | 17.0 |
| Platoro | (A) | 6M9 2/26 | 63 | 21.0 | 7.9 | 13.5* |
| River Springs | | 6M5 2/25 | 32 | 11.0 | 4.6 | 7.1 |
| <u>Sangre De Cristo Range</u> | | | | | | |
| Blue Lakes | (B) | 6M6 2/24 | 13 | 2.9 | 5.2 | - - |
| Cucharas Pass | (B) | 5M7 2/24 | 33 | 6.7 | 10.1 | - - |
| Culebra | (A) | 6M3 2/25 | 33 | 10.4 | 5.5 | 8.5 |
| LaVeta Pass | | 5M1 2/24 | 40 | 11.1 | 7.8 | 8.5 |

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
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 Colorado State University
 Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1946-52 |
|-------------|-----------------|-----------|-----------|-------------------------|
| Continental | 26.7 | 1.3 | 1.0 | 5.4 |
| Platoro | 60.0 | 2.7 | 3.0 | - - |
| Rio Grande | 45.8 | 5.8 | 4.1 | 13.0 |
| Sanchez | 103.2 | 4.7 | 5.2 | 10.2 |
| Santa Maria | 45.0 | 2.8 | 3.1 | 6.8 |
| Terrace | 17.7 | 1.8 | 1.1 | 3.0 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|--------------|----------------|-------------------|-----------|-----------|-------------------------|
| Alberta Park | 11/10 | 8.2 | 5.9 | 3.3 | 4.8 |
| Bristol View | 11/2 | 6.1 | 3.5 | 0.2 | 4.4 |
| LaVeta Pass | 11/12 | 11.9 | 6.1 | 3.7 | 7.0 |
| Mogote | 11/12 | 10.7 | 5.0 | NS | 5.3 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|----------------------------------|-------------------------|---------------------|-----------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % AVERAGE | AVERAGE 1946-52 |
| Alamosa above Terrace | 89 | 131 | 68 |
| Conejos near Mogote | 245 | 125 | 196 |
| Culebra at San Luis (2) | 31 | 147 | 21 |
| Rio Grande at 30 Mile Bridge (1) | 170 | 129 | 132 |
| Rio Grande nr Del Norte | 655 | 133 | 492 |
| South Fork at South Fork | 160 | 131 | 122 |

- (1) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir
 (2) Observed flow plus changes in storage in Sanchez Reservoir

RETURN IF NOT DELIVERED

UNITED STATES
DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
Colorado State University
Fort Collins, Colorado

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

WATERSHED IV

RIO GRANDE WATERSHED IN NEW MEXICO

as of

March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Snowfall in New Mexico remains extremely good while the snow pack in Colorado was less than average during February. Streams fed by the snow melt in New Mexico should have good runoff this summer. The next 10 days may well peak the snow year in New Mexico, but there is enough snow in the mountains to supply surface needs for the small streams originating in New Mexico. The Rio Grande has had deficient runoff for several years. This condition could be greatly improved this year, however, runoff will not be sufficient to fill reservoirs and supply surface needs.

SNOW -- Snow cover in Colorado stands at 139% of normal. This is not quite as good as last month, but still good. Snow pack in New Mexico is excellent.

SOIL MOISTURE -- Mountain soil moisture in Colorado is near normal and much better than last year. Soils in New Mexico mountains are drier than normal and will retard runoff to some extent. Soils in the irrigated area of the Upper Rio Grande are reported as fair to good. Soil in the Middle and Lower Rio Grande are generally dry.

RESERVOIR STORAGE -- Storage is much below normal in all reservoirs in New Mexico.

FORECASTS -- Forecasts range from a high of 165% of normal at San Marcial to a low of 112% on the Red River and Costilla Creek. More snow would be extremely beneficial to all areas. Forecasts are made assuming precipitation is normal for the remainder of year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

Courtney A. Tidwell, State Conservationist,
New Mexico

R. M. Bell, Area Conservationist,
Santa Fe, New Mexico

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | | |
|------------------------------|-----|---------------------|---------------------|------------------------|------------------------|-----------------|------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | | |
| | | | | | LAST YEAR | AVERAGE 1946-52 | |
| <u>Rio Grande (Colorado)</u> | | | | | | | |
| Culebra | (A) | 6M3 | 2/25 | 33 | 10.4 | 5.5 | 8.5 |
| Cumbers Pass | (A) | 6M7 | 2/26 | 70 | 25.2 | 8.2 | 17.0 |
| LaVeta Pass | | 5M1 | 2/24 | 40 | 11.1 | 7.8 | 8.5 |
| Platoro | (A) | 6M9 | 2/26 | 63 | 21.0 | 7.9 | 13.5 |
| River Springs | | 6M5 | 2/25 | 32 | 11.0 | 4.6 | 7.1 |
| Santa Maria | | 7M17 | 2/26 | 31 | 7.1 | 2.9 | 5.0 |
| Silver Lakes | | 6M4 | NS | -- | -- | 6.5 | 6.6 |
| Summitville | (A) | 6M6 | 2/26 | 66 | 21.0 | 8.1 | 15.5 |
| Upper Rio Grande | | 7M16 | 2/25 | 41 | 11.2 | 2.8 | 7.9 |
| Wolf Creek Pass | | 6M1 | 2/25 | 91 | 34.5 | 11.5 | 25.6 |
| Aspen Grove (New Mexico) | | 5P1 | 2/24 | 34 | 7.9 | 4.5 | 4.5 |
| Bateman | | 6N4 | NS | -- | -- | 7.1 | 9.8* |
| Big Tesuque | | 5P3 | 2/26 | 32 | 9.4 | 5.0 | 4.5 |
| Blue Bird Mesa | | 6P6 | 2/24 | 25 | 8.9 | 2.6 | -- |
| Capuline Peak | | 6N6 | 2/23 | 25 | 6.9 | 5.0 | -- |
| Chama Divide | | 6N2 | 2/26 | 24 | 6.6 | 0.7 | 4.2 |
| Chamita | | 6N3 | 2/26 | 41 | 12.3 | 4.4 | 9.0 |
| Cordova | (A) | 5N5 | 2/26 | 45 | 12.6 | 8.6 | 10.0 |
| Elk Cabin | | 5P4 | 2/25 | 16 | 5.3 | 2.5 | 3.2 |
| Fenton Hill | | 6P2 | 2/25 | 30 | 6.7 | 2.5 | 4.1* |
| Hematite Park | | 5N3 | 2/24 | 23 | 5.8 | 3.7 | 4.2 |
| Mora View | | 5N7 | 2/25 | 14 | 5.0 | 2.7 | -- |
| Pajarito Peak | | 6P4 | 2/24 | 6 | 2.7 | 2.8 | -- |
| Panchuela | | 5P2 | 2/26 | 20 | 5.9 | 3.3 | 2.9 |
| Payrole | (A) | 6N1 | 2/26 | 34 | 10.2 | 4.4 | 9.0 |
| Philmont | | 5N6 | NS | -- | -- | -- | -- |
| Quemazon | | 6P1 | 2/25 | 44 | 11.7 | 5.3 | 7.4* |
| Red River | | 5N1 | 2/24 | 30 | 8.0 | 4.7 | 6.3 |
| Rio En Medio | | 5P5 | 2/26 | 45 | 13.1 | 6.4 | 6.7* |
| Sandaval | | 6P3 | 2/23 | 30 | 6.5 | 3.2 | -- |
| Taos Canyon | | 5N2 | 2/25 | 24 | 6.3 | 4.2 | 4.8 |
| Tres Ritos | | 5N4 | 2/25 | 30 | 9.2 | 5.3 | 4.9 |

NOTE: 1946-52 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

-- ON ADJACENT DRAINAGE

NOTE: 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

Rio Grande at San Marcial is Forecast at 101% of the Elephant Butte Irrigation District's normal.

RETURN IF NOT DELIVERED
 UNITED STATES
 DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 Snow Survey
 Colorado State University
 Fort Collins, Colorado

OFFICIAL BUSINESS

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1946-62 |
|-----------------|-----------------|-----------|-----------|-------------------------|
| Alamogordo | 122.1 | 25.0 | 40.0 | 75.9 |
| Caballo | 344.0 | 13.2 | 34.2 | 116.7 |
| Conchas | 600.0 | 3.2 | 100.7 | 239.4 |
| Elephant Butte | 2206.8 | 154.9 | 158.2 | 389.1 |
| El Vado | 194.5 | 2.4 | 2.4 | 17.2 |
| McMillan-Avalon | 37.0 | 3.0 | 18.0 | 17.8 |
| Red Bluff (Tex) | 307.0 | 20.2 | 34.2 | 71.8 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|-------------------|----------------|-------------------|-----------|-----------|-------------------------|
| Colorado | | | | | |
| Alberta Park | 11/10 | 8.2 | 5.9 | 3.3 | 4.8 |
| Bristol View | 11/2 | 6.1 | 3.5 | 0.2 | 4.4 |
| Mogote | 11/12 | 10.7 | 5.0 | NS | 5.3 |
| New Mexico | | | | | |
| Aqua Piedra | 11/20 | 7.2 | 2.4 | 2.2 | 3.5 |
| Bateman | | 6.7 | | 0.7 | 2.2 |
| Big Tesuque | 11/6 | 3.7 | 0.5 | 1.9 | 1.2 |
| Chamita | 2/26 | 8.0 | 1.4 | 0.3 | 2.0 |
| Fenton Hill | 2/5 | 6.5 | 3.7 | 4.7 | -- |
| Red Summit | 11/23 | 4.8 | 1.5 | 2.4 | 2.5 |
| Rio En Medio | 11/6 | 3.5 | 0.6 | 1.8 | 1.1 |
| Taos Canyon | 11/23 | 3.3 | 1.7 | 2.0 | 2.3 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | FORECAST APRIL - SEPT. | THIS YEAR AVERAGE | AVERAGE 1946-52 |
|---------------------------------|------------------------|-------------------|-----------------|
| Costilla at Costilla (11) | 28 | 112 | 25 |
| Pecos at Pecos | 85 | 160 | 53 |
| Rio Chama nr La Puente | 267 | 125 | 214 |
| Rio Grande at Otowi (10)* | 950 | 156 | 609 |
| Rio Grande at San Marcial (10)* | 700 | 165 | 424 |
| Rio Hondo nr Valdez | 23 | 128 | 18 |
| Red River at Questa | 28 | 112 | 25 |

(10) Observed flow plus changes in storage in El Vado Reservoirs.

* Rio Grande at Otowi and Rio Grande at San Marcial Forecast and Average Mar-July inclusive.

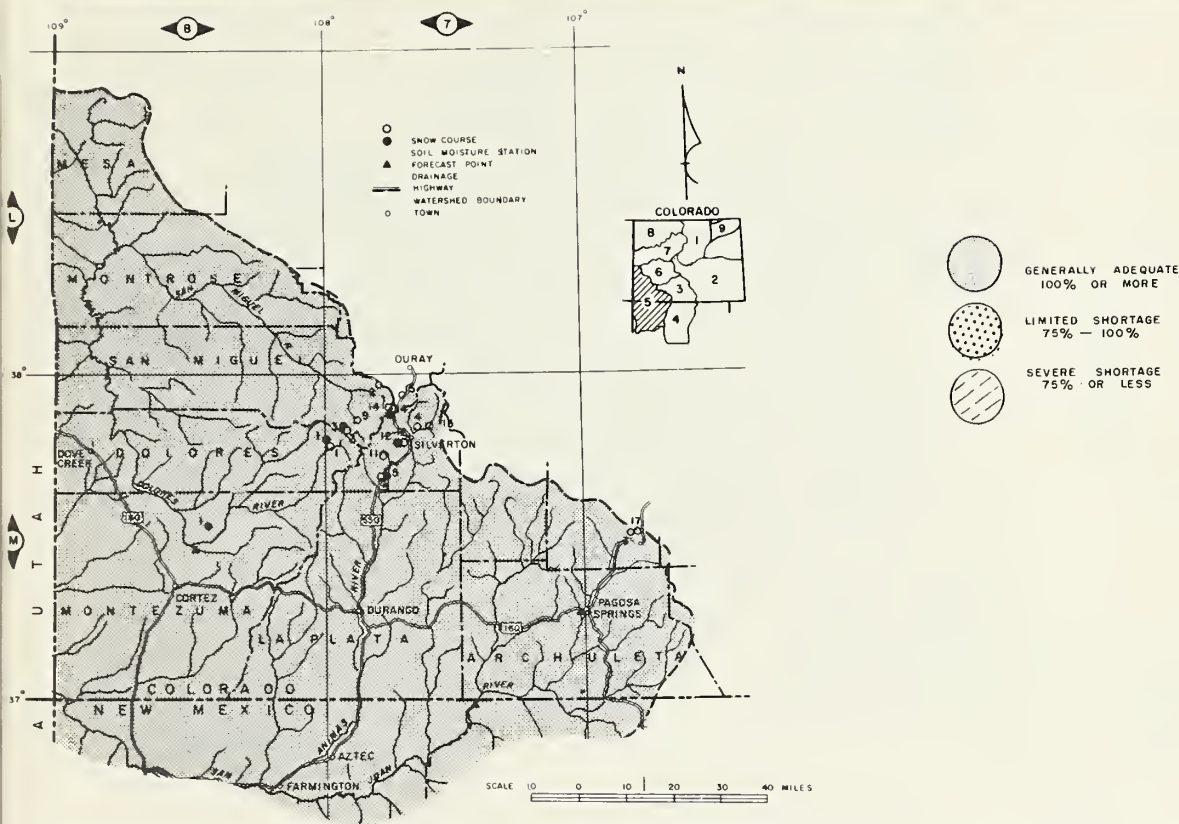
** Red River at Questa Forecast and Average April - July inclusive.

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

WATER SUPPLY OUTLOOK WATERSHED V
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN
WATERSHEDS IN COLORADO AND NEW MEXICO

as of
March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- February was a very low production month as far as snow was concerned. Only a few low intensity storms hit this area during the month. High winds hit many areas of the San Juan - Animas - Dolores area. This tends to evaporate and move the snow pack, reducing the outlook for water supplies this summer. Snowfall must continue to insure adequate or above runoff this summer.

SNOW -- Total snow pack is less percentage wise than last month. Current snow pack compared to normal, dropped 10% to 15% over the entire basin. The Animas snow pack dropped from last months high of 140% to 125% of the 1948-62 average this month. If current rates of snowfall does not increase, only normal runoff will result from the snow pack.

SOIL MOISTURE -- Soil moisture in the mountains is just about normal. These readings were made in November, so it is possible there could be some slight improvement by now. These stations will be checked again April 1st. Valley areas reported good moisture in the soil. This is one of the few places where irrigated areas are in good shape.

FORECASTS -- Current forecasts are far better than average runoff. The San Juan is forecast at 137% of normal, while the Dolores should flow 129% of average and the Animas 120%. Snowfall must continue at at least an average rate to produce good runoff.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado
Benny Martin, Area Conservationist,
Durango, Colorado
Darl Beach, Area Conservationist,
Grand Junction, Colorado

C. A. Tidwell, State Conservationist
New Mexico
Walter B. Rumsey, Area Conservationist
Albuquerque, New Mexico

SNOW

| SNOW COURSE | | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|------------------------------|-----|------|----------------------|---------------------------|------------------------------|---------------------------|--------------------|
| | | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | | LAST YEAR | AVERAGE 1949-52 |
| <u>Rio Grande (Colorado)</u> | | | | | | | |
| Culebra | (A) | 6M3 | 2/25 | 33 | 10.4 | 5.5 | 8.5 |
| Cumbers Pass | (A) | 6M7 | 2/26 | 70 | 25.2 | 8.2 | 17.0 |
| LaVeta Pass | | 5M1 | 2/24 | 40 | 11.1 | 7.8 | 8.5 |
| Platoro | (A) | 6M9 | 2/26 | 63 | 21.0 | 7.9 | 13.5 |
| River Springs | | 6M5 | 2/25 | 32 | 11.0 | 4.6 | 7.1 |
| Santa Maria | | 7M17 | 2/26 | 31 | 7.1 | 2.9 | 5.0 |
| Silver Lakes | | 6M4 | NS | — | — | 6.5 | 6.6 |
| Summitville | (A) | 6M6 | 2/26 | 66 | 21.0 | 8.1 | 15.5 |
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| Big Tesuque | | 5P3 | 2/26 | 32 | 9.4 | 5.0 | 4.5 |
| Blue Bird Mesa | | 6P6 | 2/24 | 25 | 8.9 | 2.6 | — |
| Capuline Peak | | 6N6 | 2/23 | 25 | 6.9 | 5.0 | — |
| Chama Divide | | 6N2 | 2/26 | 24 | 6.6 | 0.7 | 4.2 |
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| Mora View | | 5N7 | 2/25 | 14 | 5.0 | 2.7 | — |
| Pajarito Peak | | 6P4 | 2/24 | 6 | 2.7 | 2.8 | — |
| Panchuela | | 5P2 | 2/26 | 20 | 5.9 | 3.3 | 2.9 |
| Payrole | (A) | 6N1 | 2/26 | 34 | 10.2 | 4.4 | 9.0 |
| Philmont | | 5N6 | NS | — | — | — | — |
| Quemazon | | 6P1 | 2/25 | 44 | 11.7 | 5.3 | 7.4* |
| Red River | | 5N1 | 2/24 | 30 | 8.0 | 4.7 | 6.3 |
| Rio En Medio | | 5P5 | 2/26 | 45 | 13.1 | 6.4 | 6.7* |
| Sandaval | | 6P3 | 2/23 | 30 | 6.5 | 3.2 | — |
| Taos Canyon | | 5N2 | 2/25 | 24 | 6.3 | 4.2 | 4.8 |
| Tres Ritos | | 5N4 | 2/25 | 30 | 9.2 | 5.3 | 4.9 |

NOTE: 1949-52 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

NOTE: 1 - 1949-52 (ADJUSTED AVERAGES)
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| Red Bluff (Tex.) | 307.0 | 20.2 | 34.2 | 71.8 |

MEASURED FIRST OF MONTH

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| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|-------------------|----------------|-------------------|-----------|-----------|-------------------------|
| <u>Colorado</u> | | | | | |
| Alberta Park | 11/10 | 8.2 | 5.9 | 3.3 | 4.8 |
| Bristol View | 11/2 | 6.1 | 3.5 | 0.2 | 4.4 |
| Mogote | 11/12 | 10.7 | 5.0 | NS | 5.3 |
| <u>New Mexico</u> | | | | | |
| Aqua Piedra | 11/20 | 7.2 | 2.4 | 2.2 | 3.5 |
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| Chamita | 2/26 | 8.0 | 1.4 | 0.3 | 2.0 |
| Fenton Hill | 2/5 | 6.5 | 3.7 | 4.7 | — |
| Red Summit | 11/23 | 4.8 | 1.5 | 2.4 | 2.5 |
| Rio En Medio | 11/6 | 3.5 | 0.6 | 1.8 | 1.1 |
| Taos Canyon | 11/23 | 3.3 | 1.7 | 2.0 | 2.3 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | FORECAST APRIL - SEPT. | | THIS YEAR % AVERAGE | AVERAGE 1949-52 |
|---------------------------------|------------------------|-------|---------------------|-----------------|
| | APRIL | SEPT. | | |
| Costilla at Costilla (11) | 28 | 112 | 25 | |
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** Red River at Questa Forecast and Average April - July inclusive.

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

RETURN IF NOT DELIVERED

UNITED STATES
 DEPARTMENT OF AGRICULTURE

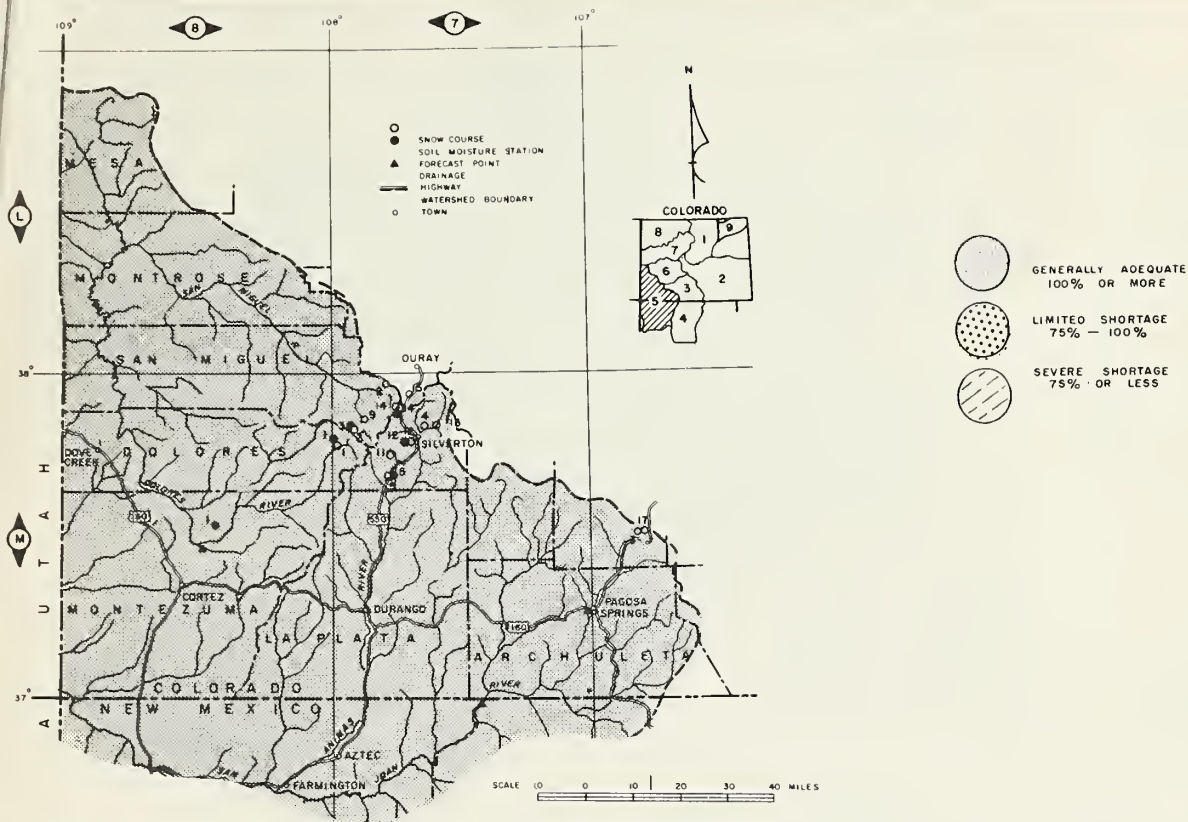
SOIL CONSERVATION SERVICE
 Snow Survey
 Colorado State University
 Fort Collins, Colorado

OFFICIAL BUSINESS

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN
WATERSHEDS IN COLORADO AND NEW MEXICO

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COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



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Albuquerque, New Mexico

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|-----------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | AVERAGE 1948-52 |
| <u>San Juan River</u> | | | | | | |
| Chama Divide (B) | 6N2 | 2/26 | 24 | 6.6 | 0.7 | 4.2 |
| Chamita (B) | 6N3 | 2/26 | 41 | 12.3 | 4.4 | 9.0 |
| Upper San Juan | 6M3 | 2/25 | 99 | 36.8 | 13.4 | 28.2 |
| Wolf Creek Pass (B) | 6M1 | 2/25 | 91 | 34.5 | 11.5 | 25.6 |
| Wolf Creek Summit | 6M17 | 2/25 | 96 | 34.6 | 11.1 | 23.2 |
| <u>Animas River</u> | | | | | | |
| Cascade | 7M5 | 2/25 | 42 | 12.7 | 4.3 | 11.9 |
| Howardville | 7M13 | 2/25 | 44 | 13.9 | 4.3 | 9.7* |
| Ironton Park (B) | 7M6 | 2/26 | 43 | 12.3 | 10.2 | 10.7 |
| Mineral Creek | 7M14 | 2/25 | 53 | 17.9 | 5.5 | 13.2* |
| Molas Lake | 7M12 | 2/25 | 47 | 15.5 | 4.5 | 12.7* |
| Red Mountain Pass | 6M19 | 2/25 | 82 | 30.3 | 15.5 | 26.0* |
| Silverton Sub-Station | 7M4 | 2/25 | 30 | 9.3 | 2.5 | 5.6 |
| Spud Mountain | 7M11 | 2/25 | 70 | 27.1 | 8.1 | 21.7* |
| <u>Dolores River</u> | | | | | | |
| Lizzard Head | 7M3 | 2/25 | 53 | 17.8 | 7.0 | 13.2 |
| Rico | 7M1 | 2/25 | 33 | 9.7 | 3.4 | 8.0 |
| Telluride | 7M2 | 2/24 | 33 | 7.9 | 5.2 | 6.7 |
| Trout Lake | 7M9 | 2/24 | 49 | 15.8 | 6.3 | 11.5* |

NOTE: * - 1948-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|------------------------|-------------------------|---------------------|-----------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % AVERAGE | AVERAGE 1948-52 |
| Animas at Durango | 545 | 120 | 456 |
| Dolores at Dolores | 335 | 129 | 260 |
| Florida nr Hermosa | 72 | 122 | 59 |
| La Plata at Hesperus | 275 | 129 | 27 |
| Piedra Creek nr Piedra | 250 | 137 | 182 |
| San Juan at Rosa NM | 820 | 137 | 597 |

* OBSERVED FLOW PLUS CHANGES IN STORAGE IN VALLECITO RESERVOIR

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|------------|-----------------|-----------|-----------|-------------------------|
| Ground Hog | 21.7 | 6.8 | 6.5 | 6.0 |
| Navajo | 1036.0 | 265.0 | 326.6 | - - |
| Vallecito | 126.3 | 35.5 | 31.8 | 46.4 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Cascade | 12/9 | 9.1 | 6.0 | 5.3 | 6.7 |
| Dolores | 11/12 | 19.6 | 0.5 | 9.8 | 4.3 |
| Lizzard Head | 11/12 | 11.8 | 9.9 | 8.1 | 8.2 |
| Mineral Creek | 12/9 | 5.7 | 3.9 | 3.4 | 3.6 |
| Molas Lake | 12/9 | 9.4 | 3.9 | 4.3 | 4.2 |
| Rico | 11/12 | 13.8 | 13.1 | 5.9 | 9.1 |

ALL PROFILES 4 FEET DEEP

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

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 SOIL CONSERVATION SERVICE
 Snow Survey
 Colorado State University
 Fort Collins, Colorado

OFFICIAL BUSINESS

GUNNISON RIVER WATERSHED IN COLORADO as of

March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL — Snowfall during February did not keep up the pace it set earlier in the winter. If the area receives a couple of good storms before the summer melt starts, water supplies will be adequate.

SNOW — The snow pack over the entire area is good. The headwaters of the Gunnison Drainage is presently 113% of the 1948-62 average. The Uncompahgre River Drainage currently has 123% of normal. The snow pack currently extends down into the lower elevation which will tend to improve the runoff of the smaller tributary streams this spring.

SOIL MOISTURE — The mountain soils are dryer than normal for this time of year. This situation tends to reduce the amount of streamflow produced from a given snow pack.

RESERVOIR STORAGE -- Taylor Park Reservoir currently contains 73,300 acre feet of useable water. Average for this date is 56,600 acre feet.

STREAMFLOW — All of the streams and rivers are forecast to flow above normal next summer. The Gunnison is forecast at 119% of normal. The Uncompahgre and Surface Creek are forecast at 133% and 123% respectively.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|--------------------------|------|---------------------|---------------------|------------------------|-------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | LAST YEAR | AVERAGE 1948-62 |
| <u>Gunnison River</u> | | | | | | |
| Alexander Lakes (A) | 7K3 | 2/26 | 62 | 19.0 | 9.1 | 17.8 |
| Black Mesa | 7L5 | NS | -- | -- | -- | -- |
| Blue Mesa | 7L2 | 2/26 | 33 | 7.6 | 5.0 | 6.5* |
| Butte | 6L11 | 2/26 | 54 | 18.9 | -- | -- |
| Cochetopa Pass | 6L6 | 2/23 | 29 | 5.7 | 4.5 | 4.9* |
| Crested Butte | 6L1 | 2/26 | 49 | 16.3 | 6.1 | 12.1 |
| Keystone | 7L3 | 2/24 | 72 | 26.8 | 8.6 | -- |
| Lake City | 7M8 | 2/25 | 36 | 9.4 | -- | 8.0 |
| Long Gulch | 7L4 | NS | -- | -- | -- | -- |
| Mesa Lakes (B) | 7K4 | 2/25 | 50 | 14.6 | 8.2 | 14.3 |
| Monarch Pass (B) | 6L4 | 2/24 | 58 | 18.6 | 9.8 | 15.6 |
| McClure Pass (A) | 7K8 | 2/26 | 55 | 18.2 | 10.0 | 15.5* |
| Mineral Creek (B) | 7M14 | 2/25 | 53 | 17.9 | 5.5 | 13.2* |
| North Lost Trail (A)(B) | 7K1 | 2/26 | 58 | 17.0 | 9.8 | 13.7 |
| Park Cone | 6L2 | 2/23 | 48 | 13.7 | 4.3 | 9.7 |
| Park Reservoir (A) | 7K6 | 2/26 | 60 | 19.3 | 10.5 | 21.1 |
| Porphyry Creek | 6L3 | 2/24 | 56 | 17.4 | 13.0 | 14.5 |
| Tomichi | 6L7 | 2/26 | 65 | 19.8 | 9.8 | -- |
| Trickle Divide (A)(B) | 7K5 | 2/24 | 46 | 15.0 | 11.4 | 22.5 |
| <u>Uncompahgre River</u> | | | | | | |
| Ironton Park | 7M6 | 2/26 | 43 | 12.3 | 10.2 | 10.7 |
| Lizzard Head | 7M3 | 2/25 | 53 | 17.8 | 7.0 | 13.2 |
| Lone Cone | 7M7 | 2/24 | 48 | 13.7 | -- | -- |
| Red Mountain Pass (B) | 7M15 | 2/25 | 82 | 30.3 | 15.5 | 26.0* |
| Telluride | 7M2 | 2/24 | 33 | 7.9 | 5.2 | 6.7 |
| Trout Lake | 7M9 | 2/24 | 49 | 15.8 | 6.3 | 11.5* |

NOTE: * - 1948-62 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|-----------|-----------------|-----------|-----------|-------------------------|
| Taylor | 106.2 | 73.3 | 42.5 | 56.6 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Grand Mesa | 11/9 | 12.5 | 9.0 | 8.4 | -- |
| King | 11/13 | 3.3 | 2.3 | 0.8 | 1.8 |
| Mineral Creek | 12/9 | 5.7 | 3.9 | 3.4 | 3.6 |
| Placita | 11/16 | 9.3 | 3.9 | 4.7 | 5.1 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|----------------------------|-------------------------|---------------------|-----------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % AVERAGE | AVERAGE 1948-62 |
| Gunnison nr Grand Jct. | 1550 | 119 | 1305 |
| Surface Creek nr Cedaridge | 21 | 123 | 17 |
| Uncompahgre at Colona | 185 | 133 | 139 |

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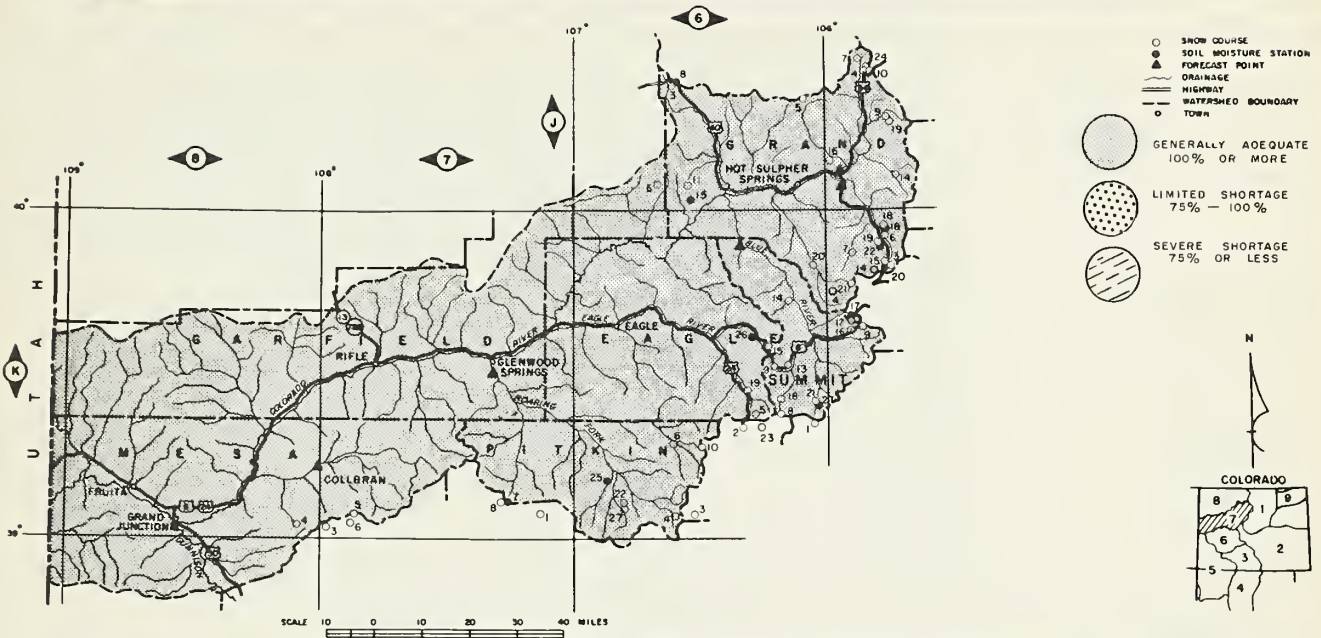
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POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL — Snowfall in the Colorado Basin has not kept pace during the month of February. High winds and unseasonably warm weather took their toll of the snow that was on the ground. Although all the basins have normal or slightly better snow pack the outlook is not as bright as last month. Snowfall must continue in the high mountains to insure adequate water this summer.

SNOW — The snow pack last month on the Colorado River Headwaters was 130% of normal. This percentage dropped to 124% this month. The Roaring Fork took the biggest dip. It dropped from 140% of normal to 116% of normal this month. Plateau Creek actually dropped to slightly below normal.

SOIL MOISTURE — Carry-over storage is comparable to last year, but less than normal for this time of year. Granby, a Big Thompson Reservoir, is far below normal.

FORECASTS — Forecasts are generally higher than the 15 year average. If snow continues to fall, water supplies will be adequate this summer, but excessive water is not indicated. Forecasts are based on average precipitation for the rest of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist
Grand Junction, Colorado
J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|---------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-62 |
| <u>Colorado River</u> | | | | | | |
| Arrow | 5K6 | 2/24 | 44 | 11.5 | 7.2 | 9.5 |
| Berthoud Pass | 5K3 | 2/26 | 47 | 14.5 | 8.4 | 12.2 |
| Berthoud Summit | 5K14 | 2/26 | 54 | 16.5 | 11.6 | 16.5* |
| Blue River | 6K21 | 2/26 | 41 | 11.2 | 5.1 | 7.5* |
| Cooper Hill | 6K23 | 2/25 | 45 | 8.8 | 5.3 | - |
| Fiddlers Gulch | 6K5 | Est. | 57 | 17.8 | 8.5 | 14.9 |
| Fremont Pass | 6K8 | 2/25 | 54 | 16.9 | 6.8 | 13.8 |
| Frisco | 6N3 | 2/26 | 34 | 9.4 | 2.8 | 7.5* |
| Glen Mar Ranch | 6K20 | 2/24 | 31 | 7.6 | 5.6 | 7.0 |
| Gore Pass | 6J11 | 2/25 | 44 | 13.5 | 5.8 | 9.1* |
| Granby | 5J16 | 2/25 | 35 | 10.2 | 3.6 | 6.2* |
| Grand Lake | 5J19 | 2/24 | 39 | 10.5 | 3.7 | 7.5* |
| Grizzly Peak | 5K9 | 2/25 | 60 | 19.4 | 8.1 | 15.0 |
| Hoosier Pass (B) | 6K1 | 2/26 | 54 | 17.1 | 6.5 | 11.1 |
| Jones Pass | 5K21 | 2/25 | 48 | 13.8 | 7.3 | 10.9* |
| Lake Irene | 5J10 | Est. | 75 | 24.0 | 12.5 | 20.0 |
| Lapland | 5K7 | 2/25 | 44 | 10.5 | 5.3 | 10.0 |
| Lulu | 5J7 | 2/28 | 53 | 16.8 | 10.0 | 14.2 |
| Lynx Pass | 6J6 | 2/25 | 46 | 13.0 | 7.5 | 10.8 |
| McKinzie Gulch | 6K28 | 2/25 | 29 | 6.5 | 3.4 | - |
| Middle Fork Campground | 5K4 | 2/24 | 38 | 9.9 | 6.0 | 8.0 |
| Milner | 5J24 | - | - | - | - | - |
| Monarch Lake | 5J14 | 2/26 | 38 | 11.5 | 5.0 | 10.7 |
| North Inlet to Grand Lake | 5J9 | Est. | 41 | 11.4 | 4.0 | 8.3 |
| Pando | 6K19 | 2/24 | 35 | 10.6 | 7.1 | 9.1* |
| Phantom Valley | 5J4 | 2/24 | 42 | 12.9 | 5.8 | 9.2 |
| Ranch Creek | 5K18 | 2/24 | 34 | 8.3 | 4.5 | 7.3* |
| Shrine Pass | 6K9 | 2/26 | 54 | 17.0 | 9.3 | 14.6 |
| Snake River | 5K16 | 2/25 | 40 | 10.7 | 4.1 | 7.9* |
| Summit Ranch | 6K14 | Est. | 32 | 9.0 | 4.5 | 7.8* |
| Tennessee Pass | 6K2 | 2/27 | 48 | 13.7 | 5.1 | 8.7 |
| Vail Pass | 6K15 | 2/26 | 59 | 19.9 | 8.7 | 16.0* |
| Vasquez Creek | 5K19 | 2/26 | 42 | 12.1 | 7.0 | 10.4 |
| Willow Creek Pass | 6J5 | 2/25 | 40 | 11.9 | 6.4 | 11.0 |
| <u>Roaring Fork River</u> | | | | | | |
| Aspen | 7J22 | 2/26 | 55 | 18.5 | 9.1 | - |
| Independence Pass Tunnel | 6K4 | 2/25 | 54 | 16.2 | 8.9 | 14.9 |
| Ivanhoe | 6K10 | 2/22 | 58 | 17.0 | 9.4 | 15.6 |
| Lift | 7K27 | 2/26 | 58 | 19.9 | 8.6 | 13.9* |
| McClure Pass (A) | 7K8 | 2/26 | 55 | 18.2 | 10.0 | 15.5* |
| Nast | 6K6 | 2/22 | 32 | 6.9 | 2.7 | 6.3 |
| North Lost Trail | 7K1 | 2/26 | 58 | 17.0 | 9.8 | 13.7 |
| <u>Plateau Creek</u> | | | | | | |
| Alexander Lake (A)(B) | 7K2 | 2/26 | 62 | 19.0 | 9.1 | 17.8 |
| Mesa Lakes | 7K4 | 2/25 | 50 | 14.6 | 8.2 | 14.3 |
| Park Reservoir (A)(B) | 7K6 | 2/26 | 60 | 19.3 | 10.5 | 21.1 |
| Trickle Divide (A) | 7K5 | 2/26 | 65 | 19.8 | 11.4 | 22.5 |

NOTE: * - 1948-62 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|----------------|-----------------|-----------|-----------|-------------------------|
| Granby | 465.5 | 72.1 | 175.6 | 201.4 |
| Green Mountain | 146.9 | 69.9 | 59.5 | 73.9 |
| Vega | 32.9 | 5.4 | - | - |
| Williams Fork | 96.8 | 15.0 | 22.0 | - |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|----------------|----------------|-------------------|-----------|-----------|-------------------------|
| Berthoud Pass | 11/17 | 3.9 | 2.5 | 3.0 | 2.6 |
| Blue River | 11/23 | 4.2 | 2.6 | 3.6 | 2.7 |
| Gore | 11/12 | 4.9 | 2.1 | 2.1 | 2.5 |
| Grand Mesa | 11/9 | 12.5 | 9.0 | 8.4 | - |
| Muddy Pass | 11/11 | 11.1 | 6.1 | 6.2 | 6.4 |
| Placita | 11/16 | 9.3 | 3.9 | 4.7 | 5.1 |
| Ranch Creek | 11/13 | 8.7 | 5.6 | 6.0 | 6.2 |
| Vail | 12/2 | 12.3 | 4.3 | 3.8 | 7.4 |
| Vasquez Siphon | 11/13 | 11.0 | 6.8 | 7.7 | 7.4 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | THIS YEAR AVERAGE | AVERAGE 1948-62 |
|--------------------------------------|-------------------------|----------|-------------------|-----------------|
| | FORECAST APRIL SEPT | FORECAST | | |
| Blue River abv Green Mt. | 305 | 112 | 274 | |
| Colo. River abv Glenwood Springs (5) | 1890 | 121 | 1556 | |
| Colo. River nr Granby (4) | 270 | 116 | 233 | |
| Plateau Cr. nr Collbran | 47 | 96 | 49 | |
| Roaring Fork at Glenwood Springs (6) | 900 | 118 | 762 | |
| Williams Fork nr Parshall | 100 | 129 | 77 | |
| Willow abv Willow Creek | 65 | 135 | 48 | |
| Colorado River nr Cameo | 2950 | 133 | 2213 | |

- (4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.
 (5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.
 (6) Observed flow plus diversion through Twin Lakes tunnel

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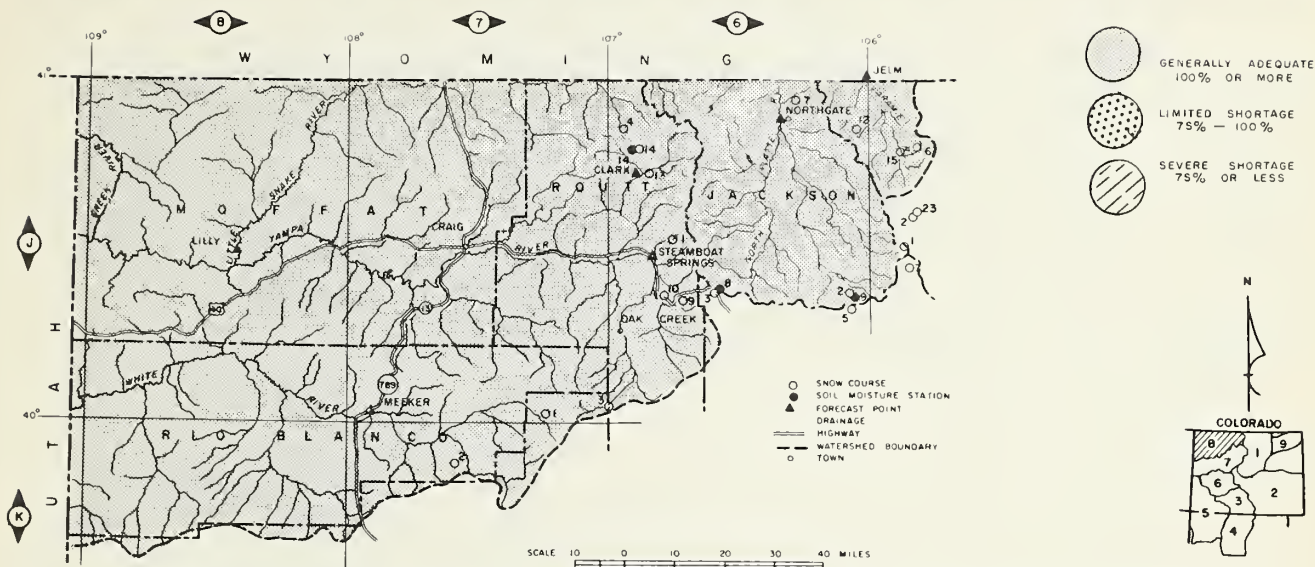
OFFICIAL BUSINESS

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE
RIVERS WATERSHEDS IN COLORADO

WATERSHED VIII

as of
March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Summer streamflow should be sufficient to supply all surface needs this summer. Snow cover in the headwaters is above normal in all water sheds. Several new snow courses have been installed in the Yampa watershed. These indicate extremely high snow cover, but it is unknown whether this is normally high or if the snow is unusually high.

SNOW -- Snow cover in the Yampa watershed is 115% of the 15 year normal. Snow was measured at Buffalo Pass the 19th of February. Here the snow averaged 119 inches deep with 43.6 inches of water. This is one of the highest readings ever made in the state. Snow on the East side of the Park Range is considerably lower. The snow pack on the headwaters of the Elk and Little Snake is excellent. White River snow pack is 129% of normal.

SOIL MOISTURE -- Soil moisture in the mountains is less than normal and even slightly poorer than last year at this time. Valley soils are generally wet and in good condition.

FORECASTS -- Forecasts on the East slope average about 105% while forecasts on the Yampa, White and Elk (or West slope) are 130% to 140% of the 1948-62 average.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|---------------------------|------|---------------------|---------------------|------------------------|------------------------|-------------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE (1946-52) |
| <u>North Platte River</u> | | | | | | |
| Cameron Pass (A) | 5J1 | 3/1 | 64 | 20.5 | 19.1 | 19.2 |
| Columbine Lodge | 6J3 | 2/26 | 72 | 25.3 | 14.1 | 20.5 |
| Deadman Hill (A)(B) | 5J6 | 3/1 | 46 | 15.2 | 13.0 | 12.9 |
| McIntyre (B) | 5J15 | NS | | | 4.0 | - |
| Northgate | 6J7 | 2/26 | 26 | 6.6 | 4.0 | 5.6* |
| Park View | 6J2 | 2/25 | 36 | 10.6 | 5.2 | 7.9 |
| Roach (A) | 6J12 | Est. | 50 | 18.6 | 7.9 | 16.2 |
| Willow Creek Pass (B) | 6J5 | 2/25 | 40 | 11.9 | 6.4 | 11.0 |
| <u>Yampa River</u> | | | | | | |
| Bear River | 7J3 | -- | -- | -- | -- | -- |
| Clark (A) | 6J13 | 2/23 | 48 | 16.8 | 9.4 | -- |
| Columbine Lodge (B) | 6J3 | 2/26 | 72 | 25.3 | 14.1 | 20.5 |
| Dry Lake (A) | 6J1 | 2/24 | 61 | 19.8 | 14.6 | 18.5 |
| Elk River (A) | 6J4 | 2/23 | 64 | 22.4 | 15.1 | 15.9 |
| Hahn's Peak | 6J14 | NS | | | -- | -- |
| Lynx Pass (B) | 6J6 | 2/25 | 46 | 13.0 | 7.5 | 10.8 |
| Rabbit Ears | 6J9 | 2/26 | 69 | 24.2 | 16.5 | 24.9 |
| Yampa View | 6J10 | 2/27 | 44 | 15.2 | 9.9 | 13.8* |
| <u>White River</u> | | | | | | |
| Burro Mountain (A) | 7K2 | 2/25 | 60 | 19.0 | 9.8 | 15.7 |
| Rio Blanco | 7J1 | 2/25 | 51 | 18.7 | 10.1 | 13.6 |

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|--------------|----------------|-------------------|-----------|-----------|-------------------------|
| Hahn's Peak | 11/12 | 19.0 | 8.9 | 13.3 | 14.4 |
| Laramie Road | 11/5 | 12.4 | 7.1 | 7.1 | 7.6 |
| Muddy Pass | 11/11 | 11.1 | 6.1 | 6.2 | 6.4 |
| Two Mile | 12/2 | 9.1 | 4.4 | 4.2 | 5.8 |
| Willow Pass | 10/15 | 9.5 | 5.7 | 7.3 | 6.8 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|---------------------------|-------------------------|---------------------|-------------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % AVERAGE | AVERAGE (1946-52) |
| Elk at Clark | 300 | 146 | 205 |
| Laramie at Jelm | 117 | 104 | 112 |
| Little Snake at Lilly | 460 | 143 | 321 |
| North Platte at Northgate | 270 | 103 | 261 |
| White at Meeker | 415 | 125 | 332 |
| Yampa at Maybell | 1320 | 143 | 923 |
| Yampa at Steamboat Spr. | 375 | 128 | 292 |

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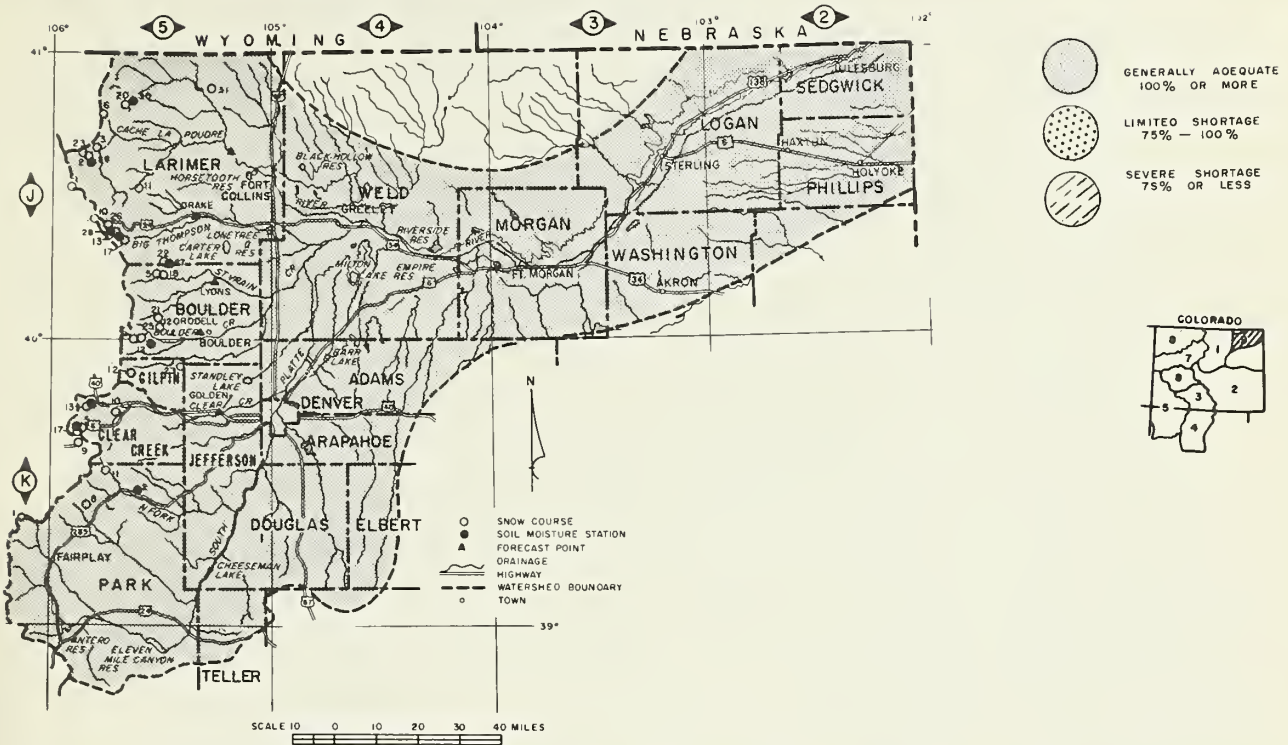
OFFICIAL BUSINESS

POSTAGE AND FEES PAID
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- This is the only area of the state that can boast good carry-over storage and can anticipate above normal runoff. This area, even though the runoff will not be extremely high, should be in relatively good shape this summer.

SNOW -- Snow pack over the entire basin is 122% of the 1948-62 average. This is only a slight decline from last month. High winds and unseasonably warm temperatures have taken their toll on the existing snow pack. Many places now have less snow than a month ago, however, the water content is higher. The snow pack should build up for another two months.

SOIL MOISTURE -- Soil moisture in the mountainous area of the South Platte is nearly normal for this time of the year. Irrigated areas are reporting poor moisture conditions.

RESERVOIR STORAGE -- Water held in storage along the Lower South Platte system is less than any of the past few years for the first of March. Storage is currently one-half of the useable capacity and 68% of normal for this date.

FORECASTS -- Forecasts range from 103% of normal on the Big Thompson River to a high of 118% on the St. Vrain. All of the other tributary streams should flow around 115% of the 1948-62 average.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Wallace L. Bruce, Area Conservationist
Sterling, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|---|----------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1946-52 |
| <u>South Platte River and Tributaries</u> | | | | | | |
| Baltimore | 5K23 | 2/26 | 25 | 6.5 | 4.6 | - - |
| Berthoud Falls | 5K13 | 2/26 | 50 | 15.0 | 9.1 | 13.0* |
| Big South | 5J3 | 2/27 | 16 | 3.7 | 1.4 | 2.5 |
| Boulder Falls | 5J25 | 2/27 | 46 | 14.5 | 7.4 | 9.9* |
| Cameron Pass | (A) 5J1 | 3/1 | 64 | 20.5 | 19.1 | 19.2 |
| Chambers Lake | 5J2 | 2/27 | 37 | 10.2 | 4.8 | 7.8 |
| Copeland Lake | 5J18 | 2/27 | 19 | 5.6 | 1.9 | 4.5* |
| Deadman Hill | (A) 5J6 | 3/1 | 46 | 15.2 | 13.0 | 12.9 |
| Deer Ridge | 5J17 | 2/25 | 19 | 5.0 | 2.2 | 4.7* |
| Empire | 5K10 | 2/24 | 29 | 7.4 | 4.0 | 6.5* |
| Geneva Park | 5K11 | 2/26 | 22 | 6.3 | 1.8 | 3.7* |
| Grizzly Peak | (B) 5K9 | 2/25 | 60 | 19.4 | 8.1 | 15.0 |
| Hidden Valley | 5J13 | 2/25 | 36 | 10.0 | 5.1 | 9.4 |
| Hoosier Pass | 6K1 | 2/26 | 54 | 17.1 | 6.5 | 11.1 |
| Hour Glass Lake | 5J11 | 2/28 | 27 | 7.7 | 3.6 | 6.0 |
| Jefferson Creek | 5K8 | 2/25 | 42 | 11.3 | 4.0 | 8.0* |
| Lake Irene | (B) 5J10 | Est. | 75 | 24.0 | 12.5 | 20.0 |
| Long's Peak | 5J22 | 2/28 | 41 | 12.5 | 4.3 | 9.8* |
| Lost Lake | 5J23 | 2/27 | 42 | 12.2 | 6.4 | 10.8* |
| Loveland Lift No. 1 | 5K24 | 2/25 | 50 | 15.9 | 12.1 | - - |
| Loveland Pass | 5K5 | 2/25 | 72 | 23.5 | 6.7 | 13.1 |
| Pine Creek | 5J31 | 2/25 | 7 | 2.0 | 1.2 | - - |
| Red Feather | 5J10 | 2/25 | 22 | 6.6 | 4.5 | 6.5* |
| Two Mile | 5J26 | 2/25 | 49 | 14.5 | 7.0 | 12.6* |
| University Camp | 5J8 | 2/27 | 58 | 19.4 | 11.1 | 17.6 |
| Ward | 5J21 | 2/25 | 27 | 7.1 | 2.9 | 5.4* |
| Wild Basin | 5J5 | Est. | 46 | 14.2 | 6.2 | 11.9 |

STREAMFLOW FORECAST

(1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

| STREAM AND STATION | FORECAST APRIL - SEPT. | THIS YEAR AVERAGE | AVERAGE 1948-52 |
|------------------------------------|------------------------|-------------------|-----------------|
| Big Thompson at Drake (2) | 113 | 103 | 110 |
| Boulder at Orodell | 60 | 111 | 54 |
| Cache La Poudre at Canon Mouth (1) | 280 | 114 | 246 |
| Clear Creek at Golden (3) | 156 | 116 | 134 |
| Saint Vrain at Lyons | 94 | 118 | 80 |

NOTE: * - 1948-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Tunnel.

RETURN IF NOT DELIVERED

UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey

Colorado State University

Fort Collins, Colorado

OFFICIAL BUSINESS

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | MEASURED FIRST OF MONTH | | |
|----------------|-----------------|-------------------------|-----------|-----------------|
| | | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE |
| | | | | 1948-52 |
| Carter | 108.9 | 81.8 | 78.9 | 63.0 |
| Cheeseman | 79.0 | 22.3 | 22.6 | 49.8 |
| Eleven Mile | 81.9 | 27.7 | 60.5 | 74.2 |
| Empire | 37.7 | 22.4 | 31.7 | 27.4 |
| Horsetooth | 143.5 | 80.2 | 81.7 | 69.5 |
| Jackson | 35.4 | 31.3 | 30.2 | 30.6 |
| Julesburg | 28.2 | 21.2 | 19.0 | 20.6 |
| Point of Rocks | 70.0 | 29.8 | 31.7 | 51.8 |
| Prewitt | 32.8 | 0 | 9.6 | 18.0 |
| Riverside | 57.5 | 31.3 | 48.1 | 44.0 |

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Alpine Camp | 11/19 | 6.9 | 3.2 | 3.3 | 3.5 |
| Beaver Dam | 12/2 | 7.1 | 3.0 | 3.3 | 3.8 |
| Clear Creek | 12/2 | 9.5 | 7.0 | 7.6 | 6.7 |
| Feather | 11/5 | 10.1 | 4.2 | 4.2 | 4.6 |
| Guard Station | 12/2 | 6.9 | 2.8 | 3.1 | 3.4 |
| Hoop Creek | 11/17 | 4.9 | 2.6 | 3.6 | 2.7 |
| Hoosier Pass | 11/23 | 7.8 | 4.3 | 4.9 | 5.1 |
| Kenosha Pass | 11/23 | 4.4 | 2.3 | 2.8 | 2.6 |
| Laramie Road | 11/5 | 12.4 | 7.1 | 7.1 | 7.6 |
| Two Mile | 12/2 | 9.1 | 4.4 | 4.2 | 5.8 |

ALL PROFILES 4 FEET DEEP

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF AGRICULTURE

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service
Soil Conservation Service

Department of Interior

Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

Department of Commerce

Weather Bureau

War Department

Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver City of Greeley
City of Boulder City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT

AG. ENGINEERING SHOP
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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*"The Conservation of Water begins
with the Snow Survey"*